

REMARKS

The application has been reviewed in light of the final Office Action dated November 6, 2007. Claims 1, 2 and 4-18 are pending, with claim 3 having previously been canceled, without prejudice or disclaimer. By this Amendment, claims 1, 5, 13, 14, 16 and 17 have been amended to clarify the claimed subject matter. Accordingly, claims 1, 2 and 4-23 are presented for continued examination, with claims 1, 5, 13, 14, 16 and 17 being in independent form.

Claims 1, 2, 4, 9-13 and 16 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Kitahara et al (US 2002/0018097 A1) in view of Matsumoto (US 2002/0021312 A1). Claims 5-8, 14, 15, 17 and 18 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Kitahara in view of Matsumoto and further in view of Ishii et al. (US 2003/0085978 A1).

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claims 1, 5, 13, 14, 16 and 17 are patentable over the cited art, for at least the following reasons.

This application relates to various improvements devised by applicant for conveying a recording medium, such as in an inkjet recording device or other image forming apparatus. Such improved device or apparatus includes a conveyance belt and a guide unit, wherein the guide unit includes a plurality of projecting stripes in contact with the conveyance belt, a top surface of the projecting stripes forms a guide surface, the projecting stripes are arranged in a direction perpendicular to a rolling direction of the conveyance belt, and the guide surface comprising the top surfaces of the projecting stripes pushes a portion of the conveyance belt corresponding to the guide surface so that the pushed portion of the conveyance belt approaches the recording unit. Each of independent claims 1, 5, 13, 14, 16 and 17 of the present application addresses

these features, as well as additional features. Such improvement enables the gap between a conveyance belt and a recording head to be precisely defined, and enables good flatness of the conveyance belt and the recording medium being conveyed to be maintained.

Kitahara, as understood by Applicant, proposes a printer comprising a transportation belt, a printer head, and a pneumatic paper sucker, wherein print paper is adsorbed to the transportation belt by the sucker, and is transported in a direction of transportation. Kitahara further proposes utilizing a flat-plate platen to apply tension to the belt while the belt is traveling.

Kitahara, as acknowledged in the Office Action, does not teach or suggest that the platen can have a number of projecting stripes or ribs in contact with the conveyance belt, a top surface of the projecting stripes forms a guide surface, the projecting stripes are arranged in a direction perpendicular to a rolling direction of the conveyance belt, and the guide surface comprising the top surfaces of the projecting stripes pushes a portion of the conveyance belt corresponding to the guide surface so that the pushed portion of the conveyance belt approaches the recording unit, as provided by the subject matter of claim 1 of the present application.

Matsumoto, as understood by Applicant, proposes a conveying apparatus for adsorbing and conveying a conveyed object. In the apparatus proposed by Matsumoto, a conveying belt 31 is provided with electrodes, a voltage is applied to electrodes (or belt attracting means) 37 provided on the conveying belt 31 to generate an electric force to attract the belt. Such electric force attracts the belt in order to suppress cockling and vertical displacement of the conveyance belt towards the recording head. Matsumoto further proposes that the plurality of belt attracting means 37 can be oriented perpendicular to the belt conveying direction.

However, the plurality of belt attracting means 37 are provided to attract the belt and do not push a portion of the conveyance belt towards the recording unit.

Matsumoto, paragraph [0071] (reproduced below) states as follows:

[0071] In addition, as shown in FIG. 16, a method of providing *a spur in a position opposing each nozzle to stretch and suspend a conveying belt is also possible. However, this will cause a problem such as deterioration of an image quality or traces of the spur in a high speed recording operation or leakage of a high voltage due to deterioration of a conveying belt surface layer.* Thus, this is not suitable for a high speed ink-jet recording apparatus of full-line type.

Thus, Matsumoto teaches away from a configuration in which electrode 37 pushes a portion of the conveyance belt towards the recording unit.

Therefore, it would not have been obvious from Matsumoto, alone or in combination with Kitahara, to have a guide unit that includes a number of projecting stripes or ribs forming a guide surface in contact with the conveyance belt, a top surface of the projecting stripes forms a guide surface, the projecting stripes are arranged in a direction perpendicular to a rolling direction of the conveyance belt, and the guide surface comprising the top surfaces of the projecting stripes pushes a portion of the conveyance belt corresponding to the guide surface so that the pushed portion of the conveyance belt approaches the recording unit, as provided by the subject matter of claim 1 of the present application.

The other reference (Ishii) is discussed in the record and does not cure such teaching away by Matsumoto with respect to claim 1 of the present application.

Applicant submits that since Matsumoto teaches away from a configuration in which electrode 37 pushes a portion of the conveyance belt towards the recording unit, the cited art does not render obvious the subject matter of claim 1 of the present application.

Independent claims 5, 13, 14, 16 and 17 are patentably distinct from the cited art for at least similar reasons.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that


independent claims 1, 5, 13, 14, 16 and 17, and the claims depending therefrom, are patentable over the cited art.

In view of the remarks hereinabove, Applicant submits that the application is now in condition for allowance, and earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that are required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul Teng", is written over a horizontal line.

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